

# INTRODUCTION.

## SCOPE AND CHARACTER OF THE REPORT.

The present volume gives a report in condensed form of the Thirteenth Decennial Census of the United States, taken in the year 1910. It covers the four principal branches—Population, Agriculture, Manufactures, and Mines and Quarries—and is complete as to all the subjects comprised under these four branches, except the subject of occupations and one or two minor inquiries of the population schedule, the data for which have not yet been fully tabulated.

Most of the results of the census for individual states and for the country as a whole have been published from time to time in the form of press notices and preliminary bulletins, but the present report is the first general publication covering all topics.

*Combination of condensed summary with detailed state presentation.*—For a group of statistical inquiries covering as many subjects as the decennial census of the United States, an exhaustive report giving results for the smaller geographic units, such as counties and minor civil divisions, needs for its presentation a series of bulky volumes. Such a report, however valuable in libraries and reference collections, is inconvenient for general use, because the main results of the census must be picked out from a mass of geographical detail, and at the same time a person who wishes complete statistics for his own state, county, or city is obliged to search through several volumes. The Bureau of the Census therefore has prepared the present volume, which assembles in one place all the general results of the census. It presents statistics regarding population, agriculture, manufactures, and mines and quarries for the United States as a whole and for individual states; and statistics regarding population and manufactures also for the principal cities.

This volume includes a supplement for the state of Maine, and is intended for distribution in that state. The supplement contains all of the details published by the census for counties and other subdivisions of the state regarding population, agriculture, and manufactures. Statistics for the state as a whole cover the same subjects in somewhat greater detail, and also mining industries. Editions for distribution in other states will contain similar supplements relating to those states.

The purpose of the report is thus to combine in one volume so far as practicable the advantages of a condensed treatment with those of an exhaustive treatment of the census results. Many persons desire general statistics for the United States as a whole, for the states as its primary subdivisions, and for the principal

cities of the country, but the interest of any one person in local details does not as a rule extend beyond the state in which he resides. The combination, therefore, of a condensed census report and a state supplement will, it is believed, meet the needs of by far the majority of those who are interested in census results.

*Limitation of term "United States."*—The area of enumeration of the Thirteenth Decennial Census included, besides the United States in the ordinary understanding of that term, Alaska, Hawaii, and Porto Rico. Other outlying possessions and dependencies were not canvassed. The totals presented for the United States do not include Alaska, Hawaii, and Porto Rico, except when expressly stated. The exclusion of these outlying possessions from most of the tables and discussion rests on the obvious differences as respects population and social and economic conditions between these distant territories and continental United States.

*Grouping of states in geographic divisions.*—Almost all the facts presented in the tables and discussed in the text of this volume are given for each state as well as for the United States as a whole. Because, however, of the large number of states, and for other reasons, it is extremely difficult to exhibit the broad geographical conditions regarding population and production by means of comparisons among individual states. In addition, therefore, to the presentation of statistics by states, this volume gives statistics for nine groups of states, which are designated as geographic divisions. The states which constitute each division can be found in any of the general tables and can be seen at a glance on the accompanying map.

This plan reduces the comparisons necessary to a general understanding of the geographic differences in conditions to a number which can be readily grasped. The states within each of these divisions are for the most part fairly homogeneous in physical characteristics, as well as in the characteristics of their population and their economic and social conditions, while on the other hand each division differs more or less sharply from most others in these respects. In forming these groups of states the lines have been based partly on physical and partly on historical conditions. These nine geographic divisions are sometimes grouped in the text tables into three great sections—the North, which includes the New England, Middle Atlantic, East North Central, and West North Central divisions; the South, which includes the South Atlantic, East South Central, and West South Central divisions; and the West, which includes the Mountain and Pacific divisions.

The grouping of the states in geographic divisions has facilitated a geographical rather than an alphabetical order in the tables which present the results for individual states. The advantage of this geographical order lies in the greater ease with which conditions in contiguous states can be compared.

*Statistics for urban and rural communities.*—Cities represent, in comparison with the remainder of the country, a distinct type of economic and industrial life. This fundamental distinction between the economic activities of urban and rural districts brings with it certain marked differences with respect to the composition and characteristics of the population. As the cities are very numerous, and as they contain often a large part of the total population of a state, these differences can not be readily perceived by comparing the statistics for individual cities with those for the states. For convenience of comparison, therefore, the more important statistics regarding the number, composition, and characteristics of the population have been presented separately for urban communities as a group and for rural communities as a group. In drawing this distinction all incorporated places (including New England towns) having a population of 2,500 inhabitants or more, are considered as urban, and the remainder of the country as rural. A discussion of this classification is found in Chapter 1.

Statistics concerning the urban as distinguished from the rural communities are given in many of the tables by states, but the more detailed statistics as well as the text discussion regarding the differences between the two classes of communities are confined to the United States as a whole and the geographic divisions. A further analysis of the urban population is given in some of the tables by classifying the cities according to their size. This grouping of the cities would have little significance in the case of many individual states, because of the small number of larger cities, but is of much interest in the case of the geographic divisions.

In addition to statistics for urban communities as a class, figures are given throughout the chapters on population and manufactures for the more important cities individually. For the larger cities the tables generally give the same details as for the states. For smaller cities the statistics are presented in more condensed form.

*Comparative and derivative figures.*—Both in the general tables and in the text discussion an effort has been made to enhance the value of the statistics for the census of 1910 by the introduction of comparative figures for earlier censuses, and by the presentation of important ratios, averages, and percentages. The full significance of census data is brought out only by comparisons between different censuses and between different classes and communities

for the same census, and comparisons based upon absolute numbers are usually much less instructive and less readily grasped than those based upon percentages and averages.

*Text discussion of tables.*—The general aspects of the statistics presented in tabular form are briefly discussed in the accompanying text. This explanatory text serves the purpose of calling attention to certain important results of the census inquiry. It is not intended that this text shall present an exhaustive analysis of the statistics. In the main, therefore, the discussion is confined to the facts disclosed by the census concerning the United States as a whole and the geographic divisions, with only occasional reference to the figures for individual states or cities. This general discussion, however, should serve as a guide in the interpretation of figures for such smaller geographic units, and should likewise be useful in preventing erroneous conclusions which might occasionally be drawn from the consideration of an isolated table, without taking into account its relation to other census data.

In the presentation of the results of the census by subjects, the text and tables relative to any subject have been treated as a unit, the tables being either inserted in the text or placed immediately after it. This represents a departure from the practice, followed in many census reports, of printing the general tables at the end of the volume and the text comment at the beginning, but it is believed to effect a distinct gain for those who consult the volume to study a given subject. At the same time those who merely refer to it for some particular figure will readily find it with the aid of the table of contents.

Maps and diagrams have been employed in this volume to present graphically some of the more important facts ascertained by the census enumeration, and have as far as possible, like the tables, been printed in immediate connection with the discussion of the subject to which they relate.

*Character of the state supplement.*—The method of presentation of the statistics in the Supplement follows closely that in the main part of the volume. Here, as in the Abstract proper, the four subjects—Population, Agriculture, Manufactures, and Mines and Quarries—are covered. Detailed figures are given for population and agriculture by counties and for population and manufactures by cities. The tables contain numerous comparative and relative figures, and the text discussion, which for the most part is confined to the statistics for the state as a whole, will aid in interpreting the figures for its subdivisions. The method of arranging the statistics of population and agriculture for the counties differs from that at previous censuses, in that all the data concerning each county are presented in a few columns instead of being

distributed by subjects among a number of distinct and widely separated tables. Statistics of population for cities are presented in similar form.

*Comparison with previous census abstracts.*—While the present condensed report of the Thirteenth Census bears the title "Abstract of the Census," it differs in important respects from the publications of previous censuses bearing the same name. The Abstracts at previous censuses were merely reference books of statistical tables relating to the United States as a whole, the states, and principal cities. They contained no text whatever; maps and diagrams were wholly lacking, and the tables presented only a very limited amount of comparative matter. The absence in these earlier Abstracts of any matter corresponding to the State Supplement rendered them works of general reference only, and not, like the present volume, works of both general and local reference.

#### ORGANIZATION OF THE THIRTEENTH DECENNIAL CENSUS.

*The permanent Census Bureau.*—The methods of collecting and tabulating the statistics of the Thirteenth Decennial Census were substantially similar to those employed in the Eleventh and Twelfth Censuses. The Thirteenth Census, however, was the first taken since the organization of the permanent Bureau of the Census. At every prior census an entirely new central organization had to be formed, as there were no permanent officials or clerks who continued in office during the interval between the decennial censuses. By virtue of the act of March 6, 1902, a permanent Bureau of the Census was created in the Department of the Interior, which bureau was subsequently transferred to the newly created Department of Commerce and Labor. One of the chief objects of this legislation was to permit the retention in the service of a certain number of persons familiar with decennial census work, but a further object was to provide an organization for the collection of certain classes of statistics during the interval between the decennial censuses. These intercensal investigations included some which had not been previously undertaken by the Federal Government at all and some which had been carried on by other bureaus of the Government. They also included certain topics which had previously been investigated in connection with the decennial census, but which were not, by their nature, essential parts of such a census, and which tended unduly to complicate the work both in the field and in the office.

*General provisions of Thirteenth Census act.*—The permanent census act of March 6, 1902, however, did not contain the special provisions of law necessary for the conduct of a decennial census. The Thirteenth Decennial Census was taken by virtue of

the act of July 2, 1909, entitled "An act to provide for the Thirteenth and subsequent decennial censuses." This act designated the three years from July 1, 1909, to June 30, 1912, as the "decennial census period" and provided for an expansion of the force of the permanent bureau in Washington during that period and for the creation of a special field force to collect the census statistics.

The Thirteenth Census act provided that the decennial census should cover the four main subjects of population, agriculture, manufactures, and mines and quarries. Of these, the subject of mines and quarries had not been covered by the census of 1900, but a special census of mines and quarries had been taken for 1902 under the provisions of the permanent census act. The Twelfth Census had covered the subject of mortality, but, as mortality statistics are collected annually by the permanent Census Bureau, the subject was omitted from the Thirteenth Census.

A list of the principal official positions provided by the Thirteenth Census act and of the persons who filled them during the Thirteenth Census period is given on another page. The position of assistant director and one of the positions of chief statistician were an addition to the positions existing under the permanent census act. Provision was also made for an appointment clerk and a secretary to the director, for an increase in the number of chiefs of division from eight to twelve, and for a large increase in the clerical force in Washington.

*Collection of statistics of population and agriculture.*—The statistics of population and of agriculture (except part of those relating to irrigation which were collected by special agents) were collected by a force of supervisors and enumerators, while the statistics of manufactures and of mines and quarries were collected by special agents or by clerks detailed from the office. The number of supervisors of the census was 330. In general, each supervisor had jurisdiction over the territory of one congressional district, but in the states of Massachusetts, Connecticut, and Rhode Island, and a number of the larger cities, a single supervisor had charge of the work (in New York City there were two supervisors, one for Manhattan and Bronx Boroughs, and one for the other three boroughs). The supervisors were appointed by the President of the United States by and with the consent of the Senate. They were paid \$1,500 each for their services, plus \$1 for each thousand inhabitants enumerated under their direction. The average population of most of the supervisors' districts was somewhat over 200,000, while the most populous district, the state of Massachusetts, had more than 3,000,000 inhabitants.

There were in all about 70,000 enumerators of population and agriculture. They were selected by the supervisors, subject to the approval of the Director of

the Census. Candidates for the position were subjected to a practical examination, and the ratings given by the supervisors to the candidates, as well as their selections, were carefully reviewed in the Census Bureau.

The censuses of agriculture and population were taken as of the date April 15, 1910. Enumerators in cities of 5,000 inhabitants or more, where the work was practically confined to population statistics, were required to complete their canvass within fifteen days after that date; but the enumerators in the smaller towns and country districts, partly because of the greater area which they had to cover and partly because they collected statistics of agriculture as well as of population, were allowed thirty days. In the larger cities, and in some instances elsewhere, the supervisors were allowed special agents to assist in instructing and supervising the enumerators.

Enumerators were in general paid piece rates, from 2 to 4 cents per name for the population census and from 20 to 30 cents per farm for the agricultural census. In sparsely settled sections per diem rates, ranging usually from \$4 to \$6, were paid. Enumerators were required to bear their own expenses of transportation and subsistence. The average amount received by enumerators on piece rates was in the neighborhood of \$4 for each day actually employed; the average total compensation of enumerators in the city districts was about \$50, and in the country districts, about \$75.

*Collection of statistics of manufactures and mines.*—Except in a very few sparsely settled sections the supervisors and enumerators had nothing to do with the census of manufactures or of mines and quarries, the schedules for these subjects being collected, as already noted, by special agents or by clerks detailed from the Census Bureau. The statistics related in general to the calendar year 1909 and were collected during the spring and summer of 1910. The special agents had varying terms of service, ranging usually from about two months to about six months. Their

pay, in some cases on a piece basis, ranged from about \$3 to \$6 per day, in addition to travel and subsistence expenses when they were away from their headquarters.

*Office force and methods of tabulation.*—The compilation of the statistics of the decennial census required a large addition to the force of the Census Bureau in Washington. The additional clerks and subclerical employees were appointed on the basis of a competitive examination by the Civil Service Commission, the appointments being apportioned among the states in accordance with their population. The total force employed at different periods of time varied greatly, the minimum, representing the permanent force of the bureau at the beginning and close of the decennial census period, being about 650, and the maximum, in the fall of 1910, about 3,800.

The statistics regarding the population were tabulated by a punched card system. Under this system a card is prepared for each individual, on which the facts as to sex, race, age, marital condition, place of birth, and the like, are indicated by the punching of appropriate holes. These cards are then sorted according to classes by sorting machines, and the holes representing the various characteristics are counted by tabulating machines. Electric contacts through the punched holes determine the groups into which the cards are sorted, and similar electric contacts operate the counters of the tabulating machines. On account of the complexity of the statistics required each card must be sorted several times and run through the tabulating machines several times. The tabulation of the statistics of population in the present report represented the equivalent of handling once on the sorting and tabulating machines more than 700,000,000 cards.

The statistics of agriculture, manufactures, and mines and quarries were tabulated for the most part by means of ordinary adding machines, no use being made of the punched card system. The schedules were first sorted by hand, according to the desired classes.

MANUFACTURES